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United States Department of Agriculture

Forest Service PA-1384

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U.S. Forest Facts



Introduction

The forest lands of the United States are of vital importance to the Nation's economy. They provide the timber and minerals that are the basic raw materials for the products used to build, furnish, and heat our homes, factories, and offices and to make paper and paper-board products, containers, and hundreds of other items. In this brochure, facts about forests, forest products, and the National Forest System in the United States, as well as a brief overview of world forests and forest products, are presented in a concise format.

Important Terms

Forest land—Land at least 10 percent stocked by forest trees of any size, including land that formerly had such tree cover and that will be naturally or artificially regenerated.

Growing-stock volume—Live trees of commercial species meeting specified standards of quality or vigor. Cull trees are excluded. Includes only trees 5.0-inches in diameter or larger at 4½ feet above ground.

Mortality—The volume of sound wood in trees that died from natural causes during a specified year.

National Forest System—A system of federally owned units of forest, range, and related land consisting of National Forests, Purchase Units, National Grasslands, and Other Lands, waters, and interest in lands, which are administered by the Forest Service or designated for administration through the Forest Service.

Net annual growth—The net increase in the volume of trees during a specified year. Components include the increment in net volume of trees at the beginning of the specific year surviving to its end, plus the net volume of trees reaching the minimum size class during the year, minus the net volume of trees that died or that became cull trees during the year.

Other forest land—Forest land other than timberland and reserved timberland. It includes unproductive forest land, which is incapable of producing annually 20 cubic feet per acre of industrial wood under natural conditions.

Receipts—Money collected from Forest Service operations such as timber sales, grazing and recreation fees, and mineral leases and permits.

Removals—The net volume of trees removed from inventory during a specified year by harvesting, cultural operations such as timber stand improvement, land clearing, or changes in land use.

Sawtimber volume—Live trees of commercial species containing at least one 12-foot sawlog or two noncontiguous 8-foot logs, and meeting regional specifications for freedom from defect. Softwood trees must be at least 9.0-inches in diameter, and hardwood trees must be at least 11.0-inches in diameter at 4½ feet above ground.

Stumpage—Uncut marketable timber.

Timberland—Forest land that is producing or is capable of producing crops of industrial wood and not withdrawn from timber utilization by statute or administrative regulation. Timberland has the capability of producing in excess of 20 cubic feet per acre per year of industrial wood in natural stands.

Land Area

	U.S.	North	South	West
Land classification (million acres)				
Total land area	2,257.4	606.7	534.1	1,116.6
Forest land	727.9	169.8	199.9	358.2
Timberland	483.1	158.3	195.4	129.4
Other	244.9	11.5	4.6	228.8
Nonforest land	1,529.5	436.9	334.1	758.4

Timberland ownership (million acres)

Total public and private	483.1	158.3	195.4	129.4
Public	136.0	32.2	19.7	84.1
Federal	96.7	11.9	15.9	68.8
National Forest	85.2	10.4	11.8	63.0
Bureau of Land				
Management	5.5	*	*	5.4
Other	6.0	1.5	4.1	.4
State	26.7	13.5	2.9	10.3
County and municipal	7.0	5.8	.7	.5
Indian	5.6	1.0	.1	4.5
Private	347.1	126.1	175.7	45.3
Forest industry	70.5	16.9	38.2	15.4
Farmer	97.0	37.8	48.7	10.5
Other	179.5	71.4	88.8	19.3

* Less than 50,000 acres.

Note: Data may not add to totals because of rounding.

Source: U.S. Department of Agriculture, Forest Service. Past, present, and future trends in the U.S. timber sector: 1952-2040. Gen. Tech. Rep. Washington, DC; In process. (Preliminary data; data as of January 1, 1987.)

Abbreviations

bd ft = board foot

cd = cord (128 cubic feet)

cu ft = cubic foot

sq ft = square foot

stn = short ton (2,000 pounds)

Timber Volume

	U.S.	North	South	West
Inventories^a				
Growing stock (million cu ft)	754,916	190,418	238,034	326,464
Softwoods	449,977	49,312	103,799	296,866
Hardwoods	304,939	141,106	134,235	29,598
Sawtimber (million bd ft ^b)	2,823,246	471,011	757,164	1,595,071
Softwoods	2,025,957	132,535	380,137	1,513,285
Hardwoods	797,289	338,476	377,027	81,786
Net annual growth, removals, and mortality^a				
Growing stock (million cu ft)				
Growth	22,387	5,598	10,429	6,360
Softwoods	12,734	1,336	5,849	5,550
Hardwoods	9,653	4,262	4,580	810
Removals	17,040	2,750	8,699	5,591
Softwoods	11,864	751	5,741	5,372
Hardwoods	5,176	1,999	2,958	219
Mortality	4,588	1,258	1,727	1,602
Softwoods	2,723	375	890	1,458
Hardwoods	1,864	883	837	145

^a Volume on timberland.

^b International 1/4-inch log rule.

Note: Data may not add to totals because of rounding.

Source: U.S. Department of Agriculture, Forest Service. Past, present, and future trends in the U.S. timber sector: 1952-2040. Gen. Tech. Rep. Washington, DC: In process. (Preliminary data. Inventories as of January 1, 1987; net annual growth, removals, and mortality, 1986.)



*Includes Alaska and Hawaii

National Forest System

	1987	1986	1985
National Forest System lands^a (thousand acres)	230,220	230,007	229,979
National Forests	223,633	223,426	223,397
Grasslands	4,218	4,217	4,217
Purchase Units	2,086	2,082	2,082
Other areas	283	282	283
Timber cut^b			
Volume (million bd ft)	12,921	12,094	11,340
Commercial sales ^c	12,712	11,786	10,941
Free use	209	308	399
Value (million \$)	1,019.0	789.9	724.5
Commercial sales ^{c,d}	1,016.0	786.9	720.6
Free use	1.1	1.4	2.2
Misc. forest products	1.9	1.6	1.7
Receipts (million \$)	898.4	831.7	635.9
Timber use	807.9	745.1	514.6
Grazing use	8.1	8.6	9.0
Recreation use	30.6	30.3	30.8
Mineral leases and permits	46.7	42.9	77.5
Special land use, etc.	5.1	4.8	4.0
No. of livestock actually grazed (thousand)			
Cattle, horses, and burros	1,410	1,491	1,565
Sheep and goats	1,134	1,168	1,183
Recreation use (million visitor-days ^e)	238.5	226.5	225.4
Camping, picnicking, and swimming	68.1	66.8	66.1
Mechanized travel and viewing scenery	75.8	62.9	60.8
Hiking, horseback riding, and water travel	20.4	25.0	25.5
Winter sports	15.2	14.7	16.2
Resorts, cabins, and organization camps	14.8	15.1	14.4
Hunting	15.7	15.3	14.6
Fishing	16.2	15.2	15.8
Other ^f	12.3	11.5	11.9

^a Gross area within unit boundaries. "Other areas" includes Land Utilization Projects, Research and Experimental Areas, and other areas.

^b Includes other products harvested on National Forests. "Miscellaneous forest products" includes material not measurable in board feet (Christmas trees, tanbark, turpentine, seedlings, Spanish moss, etc.).

^c Commercial and cost sales and land exchanges.

^d Includes collections for forest restoration or improvement under the Knutson-Vandenberg Act, 1930.

^e One visitor-day is a 12-hour aggregate of recreational use of National Forest land or water.

^f Includes nature study, team sports, gathering forest products, attending talks and programs, and other uses.

Note: Data may not add to totals because of rounding.

Source: U.S. Department of Agriculture, Forest Service.

Forest Industries

	No. of establish- ments	No. of employees (thousands)	Wages and salaries (million \$)
Establishments, employees, and wages			
Total forest industries	45,401	1,456.1	24,931.9
Logging camps	11,658	80.9	1,207.9
Wood industries	27,368	770.3	10,790.8
Sawmills and planing mills	7,403	157.8	2,305.9
Plywood and veneer mills	556	52.7	908.3
Millwork and kitchen cabinets	5,285	100.4	1,502.3
Wood furniture and fixtures	5,943	255.9	3,180.3
Other ^a	8,181	203.5	2,894.0
Pulp, paper, and allied industries	6,375	604.9	12,933.2
Pulp, paper, and board mills	594	204.9	5,470.2
Paper and paperboard products	5,781	400.0	7,463.0

	Value added by manufacture (million \$)	Value of shipments (million \$)
Value of products		
Total forest industries	55,019.8	136,386.1
Logging camps	2,501.9	8,274.0
Wood industries	19,162.9	48,265.8
Sawmills and planing mills	3,747.9	11,132.4
Plywood and veneer mills	1,272.8	4,525.9
Millwork and kitchen cabinets	2,856.8	6,309.0
Wood furniture and fixtures	6,288.5	11,722.6
Other ^a	4,996.9	14,575.9
Pulp, paper, and allied industries	33,355.0	79,846.3
Pulp, paper, and board mills	13,965.9	34,002.2
Paper and paperboard products	19,389.1	45,844.1

^a Includes industries producing wooden containers, pallets, particle-board, prefabricated wood buildings, gum and wood chemicals, and other wood products.

Note: Data may not add to totals because of rounding.

Source: U.S. Department of Commerce, Bureau of the Census. 1982 Census of manufactures. 1985.

Roundwood Production, Trade, and Consumption

	1986	1985	1984
Product (million cu ft ^a)			
Industrial roundwood			
Total			
Production	13,855	12,520	12,735
Softwoods	10,605	9,700	9,800
Hardwoods	3,250	2,825	2,935
Imports	4,360	4,340	4,165
Exports	2,305	2,070	2,060
Consumption	15,910	14,795	14,480
Softwoods	12,735	11,970	11,975
Hardwoods	3,175	2,825	2,865
Lumber			
Production	6,545	5,665	5,770
Imports	2,285	2,345	2,130
Exports	385	305	340
Consumption	8,445	7,700	7,560
Plywood and veneer			
Production	1,505	1,420	1,400
Imports	185	165	145
Exports	65	40	45
Consumption	1,625	1,550	1,500
Pulp products			
Production	4,545	4,165	4,355
Imports ^b	1,880	1,810	1,860
Exports ^b	1,085	920	930
Consumption	5,340	5,055	5,290
Logs			
Imports	15	20	30
Exports	620	655	600
Pulpwood chips			
Exports	150	145	145
Other products ^{c,d}	485	470	460
Fuelwood ^d	4,105	4,080	3,920

^a Roundwood equivalent (the volume of logs or other round products required to produce lumber, plywood, woodpulp, paper, or other similar products).

^b Includes pulpwood and the pulpwood equivalent of woodpulp, and paper and board.

^c Includes cooperage logs, poles and piling, fence posts, hewn ties, round mine timbers, box bolts, excelsior bolts, chemical wood, shingle bolts, and miscellaneous items.

^d Production and consumption.

Note: Data may not add to totals because of rounding.

Source: U.S. Department of Agriculture, Forest Service.

Production of Selected Timber Products

	1986	1985	1984
Lumber (billion bd ft, lumber tally)	42.0	36.4	37.1
Softwoods	34.8	30.5	30.8
Hardwoods	7.2	6.0	6.3
Plywood (billion sq ft, $\frac{3}{8}$ -in basis)	21.2	20.1	19.8
Softwoods	20.4	19.3	18.9
Hardwoods	.9	.8	.9
Particleboard and medium-density fiberboard (million sq ft, $\frac{3}{4}$ -in basis)	4,499	4,103	4,010
Particleboard	3,674	3,402	3,348
Medium-density fiberboard	825	701	662
Hardboard ^a (million sq ft, $\frac{1}{8}$ -in basis)	5,185	5,289	5,490
Pulpwood (million cd)	93.4	87.3	91.5
Round	57.1	52.4	54.8
Softwoods	35.3	33.0	34.7
Hardwoods	21.8	19.3	20.0
Chips	36.2	35.0	36.8
Woodpulp (million stn)	60.9	57.7	57.7
Paper and board (million stn)	72.7	68.8	70.3
Newsprint	5.6	5.4	5.5
Other paper ^b	30.5	29.3	29.6
Paperboard ^c	35.6	33.2	34.2
Insulating board	1.0	1.0	1.0

^a Shipments.

^b Includes building paper.

^c Includes wet machine board.

Note: Data may not add to totals because of rounding.

Source: U.S. Department of Agriculture, Forest Service, reporting data compiled by the U.S. Department of Commerce, Bureau of the Census, the American Paper Institute, and the National Particleboard Association.

Imports and Exports

	Imports ^a				Exports			
	Volume		Value ^b (million \$)		Volume		Value ^c (million \$)	
	1987	1986	1987	1986	1987	1986	1987	1986
Total all products	—	—	15,268	13,271	—	—	9,940	7,692
	(million bd ft)				(million bd ft)			
Logs	83	78	22	11	4,108	3,627	1,644	1,227
Softwoods	69	52	19	7	3,959	3,488	1,526	1,129
Hardwoods	14	26	3	4	149	139	118	97
Lumber	15,234	14,619	3,333	3,138	3,257	2,427	1,349	994
Softwoods	14,695	14,249	3,055	2,966	2,464	1,877	856	644
Hardwoods	511	347	273	168	775	526	487	344
Railroad ties	28	23	5	3	19	23	6	6
	(million sq ft)				(million sq ft)			
Veneer	2,107	1,997	159	130	1,776	1,466	128	97
Softwoods	424	393	17	16	391	470	16	15
Hardwoods	1,682	1,604	142	115	1,385	996	112	82
Plywood	4,094	3,941	633	519	855	656	194	145
Softwoods	144	132	39	34	796	596	179	131
Hardwoods	3,950	3,809	593	485	60	61	15	13
Particleboard	1,054	1,210	150	137	227	172	54	34
Hardboard	832	859	63	56	269	183	35	24
	(thousand cd)				(thousand cd)			
Pulpwood	428	629	17	24	2,013	1,947	189	172
Round	15	61	2	5	16	42	1	2
Chips	412	568	15	20	1,997	1,904	188	170
	(thousand stn)				(thousand stn)			
Woodpulp	4,963	4,594	2,069	1,606	4,868	4,459	2,250	1,663
Paper and board	12,837	11,939	6,928	6,038	5,304	4,816	3,104	2,549
Newsprint	8,987	8,588	4,121	3,682	340	392	210	195
Other paper and board	3,449	2,959	1,874	1,565	4,239	3,899	2,070	1,669
Paper and board products	402	392	933	790	725	525	823	686
Other wood products ^d	—	—	1,890	1,613	—	—	992	787

^a Imports for consumption.

^b Customs value which is generally defined as the price actually paid or payable for merchandise when sold for exportation to the United States, excluding U.S. import duties, freight, insurance, and other charges.

^c Value (free alongside ship) at U.S. ports of export, based on the transaction price, including inland freight, insurance, and other charges.

^d Includes poles and piling, fuelwood, wood charcoal, cork, waste paper, wood containers, wood doors, and other miscellaneous products.

Note: Data may not add to totals because of rounding.

Sources: U.S. Department of Commerce, Bureau of the Census, and the American Paper Institute.

Prices

	1987	1986	1985
Stumpage prices			
(\$ per thousand bd ft ^a)			
All species	126.40	97.60	77.20
All softwoods	127.60	98.60	77.80
Douglas-fir ^b	190.20	160.70	126.20
Southern pine ^c	135.70	103.60	90.70
Ponderosa pine ^{d,e}	213.60	156.60	101.40
Western hemlock ^f	105.40	74.70	50.50
All hardwoods	86.20	67.40	63.20
All eastern hardwoods ^g	88.10	69.90	65.40
Oak, white, red, and black ^g	146.80	108.10	94.50
Log prices^h			
Sawlogs (\$ per thousand bd ft)			
Southern pine ⁱ	201.70	176.00	186.10
Gums ⁱ	143.60	144.10	148.60
Oaks ⁱ	171.10	159.90	156.30
Aspen, woodsrun ^j	108.50	98.00	94.50
Maple, woodsrun ^j	152.50	172.50	165.00
Yellow birch, woodsrun ^j	141.50	162.50	169.00
Veneer logs (\$ per thousand bd ft)			
Aspen, prime and No. 1 ^j	223.00	153.00	150.00
Maple (hard), prime and No. 1 ^j	294.00	294.00	281.00
Yellow birch, prime and No. 1 ^j	341.00	338.00	310.00
Walnut ^k	1,905.00	2,008.00	1,573.00
White oak ^k	1,220.00	1,198.00	1,176.00
Pulpwood logs (\$ per cord)			
Southern pine ^l	50.70	48.10	49.20
Hardwoods ^l	45.30	35.40	37.50
Pine ^m	48.20	54.80	54.80
Aspen ^m	34.40	37.50	37.50

^a Average prices for sawtimber sold on National Forests. High bid prices. Timber is sold on a Scribner Decimal C log rule basis except in the Northeast, where International 1/4-inch log rule is used.

^b Western Washington and western Oregon.

^c Southern Region.

^d Pacific Southwest Region.

^e Includes Jeffrey pine.

^f Pacific Northwest Region.

^g Eastern and Southern Regions.

^h Delivered prices.

ⁱ Louisiana. Doyle log scale.

^j Wisconsin. Scribner log scale.

^k Illinois. F.o.b. Log scales used by reporting buyers: Doyle—94%, Scribner—5%, International—1%.

^l Louisiana. F.o.b. car.

^m Wisconsin.

Sources: U.S. Department of Agriculture, Forest Service, the Louisiana Department of Agriculture, the University of Wisconsin, and the Illinois Department of Agriculture.

World Forestry Data

	All species			Soft- woods	Hard- woods
	Total	Closed ^a	Other		
Forest area, 1980 (million acres)					
Total	10,676	7,285	3,391	3,617	7,059
North America					
United States	737	482	254	390	346
Canada	1,078	653	426	865	213
Mexico	118	118	—	51	68
Central America ^b	61	60	1	11	50
South America	2,261	1,648	613	51	2,210
Africa	1,837	583	1,254	34	1,803
Europe	393	339	54	242	151
U.S.S.R.	2,295	1,956	339	1,680	615
Asia	1,157	894	263	253	904
Oceania	739	552	187	40	699

	Production	Imports	Exports
Industrial roundwood,^c 1985 (million cu ft)			
Total	53,044	3,859	3,718
North America			
United States	12,239	85	751
Canada	5,831	162	164
Mexico	264	*	—
Central America ^b	127	3	1
South America	2,933	6	47
Africa	1,919	36	158
Europe	10,359	1,371	899
U.S.S.R.	9,726	9	594
Asia	8,661	2,186	773
Oceania	986	*	330

^a Forest land with 20 percent or more tree crown cover.

^b Includes the West Indies.

^c Includes sawlogs and veneer logs, pitprops (mine timbers), pulpwood, and other industrial products.

* Less than 500,000 cubic feet.

Note: Data may not add to totals because of rounding.

Sources: United Nations, Food and Agriculture Organization. Forest resources 1980. 1985; 1985 Yearbook of forest products. 1986.

